

PRP DATA EXTRACTION FORM  
LOWER PASSAIC RIVER STUDY AREA

SDMS Document



96324

**ROYCE CHEMICAL COMPANY**

**CURRENT MAILING ADDRESS/CONTACT INFO:**

Albert Royce III, President  
Royce Associates  
366 N. Broadway, Ste. 400  
Jericho, NY 11753. USA  
Tel: 516-367-6298  
Fax: 516-367-6291  
E-mail: info@royceintl.com

**FACILITY ADDRESS:**

Royce Chemical Company  
17 Carlton Avenue  
East Rutherford, New Jersey (KBN000008)

**FINANCIAL VIABILITY** (annual revenue, # of employees):

Royce Associates, the successor to Royce Chemical Company, operates four locations with over 50 employees and reports sales of approximately \$20,000,000 annually.

**DATES OF OPERATION** (include info. on predecessors/successors if known):

1929 - 1982 (KBN000011-12)

**DESCRIPTION OF FACILITY OPERATIONS** (list CERCLA hazardous substances used, manufactured or present):

The Royce Chemical Company facility was located on Carlton Avenue in East Rutherford and bordered by Erie Avenue and a spur of the Erie-Lackawanna Railroad to the south; Carlton Avenue to the west, and residential properties to the north and east. (KBN000012)

According to industrial directories and other company documents dating from 1931 to 1982, Royce Chemical manufactured sodium hydrosulfite, zinc oxide, sodium sulfoxalate formaldehyde, and zinc sulfoxalate formaldehyde as ingredients for the textile and rubber manufacturing industries. (KBN000012; KBN000073) NPDES Permit documents

identify the manufacture of sodium dithionite, sodium and zinc hydroxymethane sulfinate and zinc oxide at Royce's facility. (KBN000056) Raw materials for production included zinc powder, sulfur dioxide, sodium chloride, sodium ash, methanol, zinc carbonate, formaldehyde and caustic soda. Additional processes at the facility included the production of water softeners, textile gums, finishes, sulphonated oils, royox, desizing agents, water repellents and concentrated cleaners. (KBN000012)

From at least 1941 to 1982, Royce reportedly used a large lake/pond at the rear of the property to receive non-contact cooling water, the overflow of which was received by a drainage ditch (also referred to in NJDEP reports as an "unnamed tributary") along the southern border of the property and "ultimately discharging to the Passaic River." Process wastes were discharged to the PVSC system. (KBN000013)

During several inspections of the facility following the end of Royce's operations, material was noted as remaining on the property and during one inspection, "poor and inadequate" housekeeping was noted. During a March 1982 inspection by NJDEP, the following materials remained onsite:

- 15 to 20 dump truck loads of zinc carbonate and zinc oxide in 1,000 drums;
- 20,000 gallons of zinc slurry in two slurry tanks;
- 20,000 gallons of zinc slurry in a cement slurry pit and two catch basins (the slurry pit having been used to convey scrubber material from a kiln that converted zinc carbonate to zinc oxide);
- 3,000 gallons of formaldehyde contained in a tank inside the process building;
- 2,000 gallons of sodium hydroxide solution;
- four 55-gallon drums of compressor oil; and
- 50 drums of zinc powder on the bottom floor of Building No. 1.

Also noted during the inspection were two spills of oily material and several areas of white powder throughout the lot. (KBN000073-77; KBN000013) A subsequent NJDEP inspection noted that 12 underground gasoline storage tanks had been present at the site, that there were at least 20 drums of waste oil present, and settling basins within the buildings required cleaning. (KBN000013-14, KBN000016)

During demolition activities at the site, a spill of 350 gallons of diesel fuel flowing to a southeast pond on the site was observed. Remedial activity relating to this spill reportedly occurred during the three days following the spill, as well as in September 1984, during the construction of townhouses at the site. (KBN000014)

Spills of No. 6 heating oil reportedly caused soil contamination at the site. Waste disposal manifests indicate that soils and oily waste were removed from the Royce facility in May and August 1983. The site was completely razed by the end of 1983. (KBN000015)

Although NJDEP has noted that Royce Chemical Company had "several problems regarding air pollution regulations," no New Jersey Air Pollution Control Certificate

could be located. (KBN000015, KBN000022) A newspaper article dated February 17, 1982 indicates that more than 60 air violations within two years were documented at the site. (KBN000069)

#### **Site Soil Contamination:**

In 1982, material characterized as TSCA-regulated "Waste PCB Contaminated Soil and Debris" was manifested and removed from the Royce facility for disposal. (KBN000067) Reportedly, this was PCB-contaminated soil removed as a result of a leaking transformer. (KBN000074)

In 1984, a series of soil samples from within the facility boundaries were collected in connection with development of the site for residential purposes. The following volatile organic compounds were detected.

- Chlorobenzene
- Ethylbenzene
- Toluene
- Trichlorofluoromethane (freon)

(KBN000024-25; KBN000156-KBN000188)

The following metals were detected in the 1984 on-site soil samples.

- Arsenic
- Barium
- Cadmium
- Chromium
- Lead
- Mercury
- Selenium
- Zinc

(KBN000024; KBN000156-KBN000188)

#### **Site Sediment Contamination:**

NJDEP documentation indicates that in 1984, sediment and surface water samples were collected from the aforementioned on-site pond. It was noted that volatile organic compound contamination was found within water and sediment samples, including:

- Benzene
- Ethylbenzene
- Toluene
- Methylene Chloride
- Perchloroethylene

(KBN000020; KBN000156-KBN000188)

Metals were detected above detection limits in the sediment and surface water samples. These included:

- Arsenic
- Barium
- Cadmium
- Chromium
- Lead
- Mercury
- Selenium
- Silver
- Zinc

(KBN000020; KBN000156-KBN000188)

No information regarding contamination in the onsite unnamed tributary or “drainage ditch” to the Passaic River is available.

**Site Groundwater Contamination:**

No information on groundwater contamination is available.

**PERMITS** (provide dates):

NPDES: NJPDES Permit # 0002682. (KBN000012-13, KBN000015)

Royce discharged via a drainage ditch along the southern border of the property from its onsite pond/lake and ultimately into the Passaic River. (KBN000012 - KBN000013)

PVSC (pretreatment): PVSC Permit # 06401173. (KBN000013, KBN000016, KBN000146-155)

Industrial process wastes were discharged from Royce to the PVSC system. (KBN000013)

**NEXUS TO LOWER PASSAIC RIVER STUDY AREA** (describe in detail; cite to supporting documentation; date or time period of disposal; list CERCLA hazardous substances; and volume, if known):

Direct (e.g. pipe, outfall, spill):

NJDEP noted that overflow from the onsite pond (containing elevated levels of zinc, lead, toluene, benzene, ethylbenzene and chromium) entered an unnamed tributary of the Passaic River. (KBN000021) Sampling data for the discharge or tributary sediments are not available, but NJDEP notes “[i]t is possible that the unnamed tributary and the Passaic River may have received contamination from this source.” (KBN000021-22)

Sanitary Sewer (provide name and location of CSO; details regarding CSO overflows and dates):

Information not available at this time.

Storm Sewer:

In 1979, PVSC reported pollution characterized as “caustic material”, as well as C.O.D. and T.O.C. parameters, repeatedly discharging from both a Royce Chemical drain and the loading dock, and thereafter into a ditch leading to the Carlton Hill storm sewer and draining into the Passaic River. (KBN000002-4).

Runoff:

Information not available at this time.

Groundwater:

Information not available at this time.

**POTENTIAL NEXUS TO LOWER PASSAIC RIVER STUDY AREA** (describe in detail; cite to supporting documentation; list CERCLA hazardous substances; and volume, if known):

Direct (e.g. pipe, outfall, spill):

See above discussion for documented direct discharges from facility operations to unnamed tributary to the Passaic River

Sanitary Sewer (provide name and location of CSO; details regarding CSO overflows and dates):

A NJDEP memorandum dated March 26, 1982, prepared pursuant to a RCRA generator inspection, indicates that Royce was going to wash floors and drums of zinc-bearing powder via troughs within the process building to the PVSC sewer. The NJDEP inspector also noted that at that time, Royce had ceased its 24-hour

composite sampling even though they were still discharging to the PVSC.  
(KBN000071-73, KBN000075)

During the March 26, 1982 NJDEP inspection, it was noted that within a diked area on the property, PCBs leaked from a transformer. Also within this diked area was a “drain that led to the PVSC treatment plant.” (KBN000076)

Storm Sewer (provide name and location of CSO; details regarding CSO overflows and dates):

See above discussion for documented discharges to the storm sewer and thereafter to the Passaic River.

Runoff:

The potential exists for run-off of spills, leaks and other discharge events from facility operations and hazardous material storage. NJDEP noted that an unnamed tributary of the Passaic River was located onsite with a flow of 10 cfs. The Passaic River is also noted by NJDEP as a potential migration pathway within a distance of 0.5 miles of the facility. (KBN000019)

A NJDEP Preliminary Assessment of the site reports that soil borings at the site indicate low levels of subsurface contamination consisting of ethylbenzene, chlorobenzene and toluene at the location of the former buildings. (KBN000019) NJDEP also notes that no subsurface samples were analyzed for base/neutral compounds or metals “which may have been more appropriate for this site.” (Id.)

A NJDEP memorandum dated March 26, 1982 indicates that a large pile of zinc material and spills of similar material were contaminating runoff at the site. (KBN000071)

Groundwater:

Information not available at this time.